

## Product datasheet for **RG235202**

### ALPK1 (NM\_001253884) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ALPK1 (NM\_001253884) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** ALPK1  
**Synonyms:** 8430410J10Rik; LAK  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG235202 representing NM\_001253884  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGTCGGAAGAGGACAAGAGCGAGGACCAGCGCTGCAGAGGCGTCCCTGAGGGCCTCCATCCTCGCTC  
GGGACTGTGCGGCTGCGGCGGCTATTGTGTTCTTGGTGGACCGTTCTGTATGGGCTCGACGTCTCTGG  
AAAACCTTCGAGGTCGCCAAAGGTCTCCACAAGTTGCAGCCAGCCACGCCAATTGCCCGCAGGTGGTT  
ATTCGCCAAGCCGAATCTCCGTGAACCTCAGGAAAACCTTTAAAAGCAGAGTATATCTGAGCAGCTAA  
TAAGCAACAATGGAGCAACGGGTACCTGGCTGTACAGAAATGAAAGTGACAAGGCTCTGGTGCAGTCGGT  
CTGTATACAGATCAGAGGCGAGATTCGCAAAAAGCTGGGGATGTGGTACGAAGCAGCAGAGTTAATATGG  
GCCTCCATTGTAGGATATTTGGCACTTCTCAGCCGGATAAAAAGGGCCTCTCCACGTCGCTAGGTATAC  
TGGCAGACATCTTTGTTCCATGAGCAAGAACGATTATGAAAAGTTTAAAAACAATCCACAAATTAATTT  
GAGCCTGCTGAAGGAGTTTGACCACCAATTTGCTGTCCGCTGCAGAAGCCTGCAAGCTGGCAGCTGCCTTC  
AGTGCCTATACGCCGCTCTTCGTGCTCACAGCTGTGAATATCCGTGGCACGTGTTTATTGTCCTACAGTA  
GTTCAAATGACTGTCTCCAGAATTGAAAACTTACATCTGTGTGAAGCCAAAGAGGCTTTGAGATTGG  
CCTCCTCACCAAGAGAGATGATGAGCCTGTTACTGGAAAACAGGAGCTTCACAGCTTTGTCAAAGCTGCT  
TTCGGTCTCACCAAGTGCACAGAAGGCTCCATGGGGAGACAGGGACGGTCCATGCAGCAAGTCAAGTCT  
GTAAGGAAGCAATGGGGAAGCTGTACAATTTAGCACTTCTCCAGAAGTCAGGACAGAGAAGCTCTGTC  
TCAAGAAGTTATGCTGTGATTGCCAGGTGAAGGAACATTTACAAGTTCAAAGCTTCTCAAATGTAGAT  
GACAGATCTTATGTTCCCGAGAGTTTCGAGTGCAGGTTGGATAAACTTATCTTGCATGGGCAAGGGGATT  
TCCAAAAAATCCTTGACACCTATTCACAGCACCATACTTCGGTGTGTGAAGTATTTGAAAGTGATTGTGG  
AAACAACAAAAATGAACAGAAAGATGCAAAAACAGGAGTCTGCATCACTGCTCTAAAAACAGAAATAAAA  
AACATAGATACTGTGAGTACTACTCAAGAAAAGCCACATTGTCAAAGAGACACAGGAATATCTTCTCTCC  
TAATGGGTAAGAATGTTCCAGAGGAACTCAGAAGGGGAGGAAGGAGAACTGGACCCATTCTGATGCATT  
TCGAGTCTCCTTGATCAAGATGTGGAGACTGAGACTGAGCCATCGGACTACAGCAATGGTGAGGGAGCT



GTTTTCAACAAGTCTCTGAGTGGCAGCCAGACTTCCAGTGCTTGGAGCAACTTATCAGGGTTTAGTTCCT  
CTGCAAGCTGGGAGGAAGTGAATTATCACGTTGACGACAGGTGAGCCAGAAAAGAGCCTGGCAAAGAACA  
TCTGGTGGACTCAGTGTCCACTGCCTGTCTGAGGAGCTAGAGAATGACAGGGAAGGCAGAGCTATG  
CATTATTGCATTACAGCTTATGATCTCTCTTTCAGGAACCAACAATGACAATTTGGAGCCTTCTC  
AAAATCAGCCACAGCAACAGATGCCCTTGACACCTTCTCGCCTCATAATACCCAGGCATTTTCTGGC  
CCCTGGTGCAGGGCTTCTAGAAGGAGCTCCAGAAGGTATCCAGGAAGTCAGAAATATGGGACCCAGAAAT  
ATTTCTGCTCACTCCAGACCCTCATATCGTTCTGCTTCTGGTCTTCTGATTCTGGTAGGCCAAGAATA  
TGGGCACACATCCTTCAGTCCAAAAAGAAGCCTTTGAAATAATTGTTGAGTTTCCAGAAACCAACTG  
CGATGTCAAAGACAGGCAGGGGAAAGAGCAGGGAGAAGAAATTAGTAAAAGAGGCGCAGGCCCTACATTT  
AAAGCTAGTCCCTCCTGGGTTGACCCAGAAGGAGAAAACAGCAGAAAGCACTGAAGATGCACCCTTAGACT  
TTCACAGGGTCTGCACAATTCTCTGGGAAACATTTCCATGCTGCCATGTAGCTCCTTACCCTAATTG  
GCCTGTTCAAATCCTGACTCCAGAAAAAGTGGTGGCCAGTCGACAGCAGGGCATCGACCCTGATGCC  
TCCACAGTGGATGAGGAGGGCAACTGCTCGACAGCATGGATGTTCCCTGCACAAATGGGCACGGCTCTC  
ATAGACTGTGCATTCTGAGACAGCCGCTGGTCAGAGGGCGGAGACCCCAATTCCTCTGTAAGCGGTAA  
CATCCTTCCCTGTCCTCAGCGAGGACTGCACTACCACAGAGGAAGAAATCAGCCTGGAAACATGCTA  
AACTGCAGCCAGAACTCCAGCTCATCCTCAGTGTGGTGGCTGAAATCACCTGCATTTTCCAGTGGTCTT  
CTGAGGGGGACAGCCCTTGGTCTATCTGAATTCAGTGGGAGTTCTTGGGTTTCATTGCCGGGAAAGAT  
GAGGAAAGAGATCCTTGAGGCTCGCACCTTGCAACCTGATGACTTTGAAAAGCTGTTGGCAGGAGTGAGG  
CATGATTGGCTGTTTCAGAGACTAGAGAATACGGGGGTTTTTAAGCCAGTCAACTCCACCGAGCACATA  
GTGCTCTTTTGTAAAAATTTCAAAAAATCTGAACTGTGGACGGCCAGGAAACTATTGTCTATTTGGG  
GGACTACTTGACTGTGAAGAAAAAGGCAGACAAAGAAATGCTTTTTGGGTTTCATCATCTTCATCAAGAA  
GAAATTTGGGGAGGTATGTTGGGAAAGACTATAAGGAGCAGAAGGGGCTCTGGCACCACCTCACTGATG  
TGGAGCGACAGATGACCGCACAGCACTATGTGACAGAATTTAACAAGAGACTCTATGAACAAAACATTCC  
CACCCAGATATTCTACATCCCATCCACAATACTACTGATTTTAGAGGACAAGACAATAAAGGGATGTATC  
AGTGTGGAGCCTTACATACTGGGAGAATTTGTAATTTGTAATTAACACGAAAGTGGTAAAACAGAAT  
ACAAAGCCACAGAATATGGCTTGGCCTATGGCCATTTTTCTTATGAGTTTTCTAATCATAGAGATGTTGT  
GGTCGATTTACAAGTTGGGTAACCGTAATGGAAAAGGACTCATCTACCTCACAGATCCCAGATTAC  
TCCGTTGATCAGAAAGTTTTCACTACCAATTTTGGAAAGAGAGGAATTTTTACTTCTTTAATAACCAGC  
ATGTGGAATGTAATGAAATCTGCCATCGTCTTTCTTTGACTAGACCTTCAATGGAGAAACCATGCACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235202 representing NM\_001253884  
 Red=Cloning site Green=Tags(s)

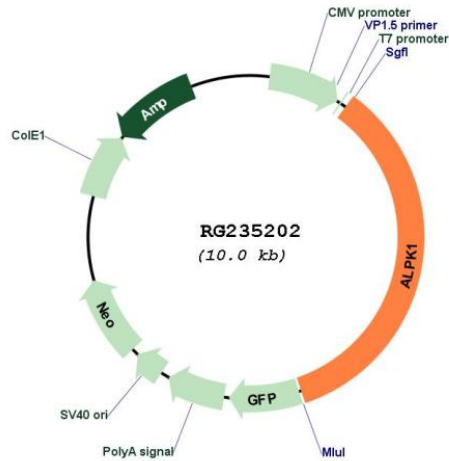
MCRKRTRARTSAAEASLRASILARDCAAAAAIVFLVDRFLYGLDVSGLKLVQAKGLHKLQPATPIAPQVV  
 IRQARISVNSGKLLKAEYILSSLISNNGATGTWLYRNEVDKVLVQSVCIQIRGQILQKLGMYEAAELIWA  
 ASIVGYLALPQPKKGLSTSLGILADIFVSMKNDYEKFKNNPQINLSLLKEFDHLLSAAEACKLAAAF  
 SAYTPLFVLTAVNIRGTCLLSYSSSNDPCPELKNLHLCEAKEAFEIGLLTKRDDEPVTGKQELHSFVKAA  
 FGLTTVHRRHLHGETGTVHAASQLCKEAMGKLYNFSTSSRSQDREALSQEVMSVIAQVKEHLQVQSFNV  
 DRSYVPESEFECRLDKLILHGQGFQKILDTYSQHHTSVCEVFESDCGNNKNEQKDAKTGVCITALKTEIK  
 NIDTVSTTQEKPHCQRDTGISSSLMGKNVQRELRRGRRNWTSHDAFRVSLDQDVETETEPSDYSNGEGA  
 VFNKSLSGSQTSSAWSNLSGFSSASWEEVNYHVDDRSARKEPGKEHLVDTQCSTALSEELENDREGRAM  
 HSLHSQLHDLSLQEPNNDNLEPSQNQPQQMPLTPFSPHNTPGIFLAPGAGLLEGAPEGIQEVNRMGPRN  
 TSAHSRPSYRSASWSSDGRPKNMGTHPSVQKEEAFEIIVFPEPNTCDVKDRQGKEQGEIISERGAGPTF  
 KASPSWVDPEGETAESTEDAPLDFHRVLHNSLGNISMLPCSSFTPNWPVQNPDSRKS GGPVAEQGIDPDA  
 STVDEEQQLDSDMDVPCNNGHSHRLCILRQPPGQRAETPNSSVSGNILFPVLS EDC TTTTEEGNQPGNML  
 NCSQNSSSSVWMLKSPAFSSGSSEGDSPWSYLNSSGSSWVSLPGKMRKEILEARTLQPDDEFKLLAGVR  
 HDWLFQRLQENTGVFKPSQLHRAHSALLKYSKSELWTAQETIVYLDYLVTKKGRQRNAFWVHHLHQE  
 EILGRYVGKDYKEQKGLWHHFTDVERQMTAQHYVTEFNKRLYEQNIPTQIFYIPSTILLILEDKTIKGC  
 SVEPYILGEFVKLSNNTKVVKTEYKATEYGLAYGHFSYEF SNHRDVVDLQGWVTGNGKGLIYLTDPQIH  
 SVDQKVF TTFNGKRGIFYFFNNQHVECNEICHRLSLTRPSMEKPC T

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI  
 Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001253884

ORF Size: 3498 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_001253884.1](#), [NP\\_001240813.1](#)

RefSeq Size: 5234 bp

RefSeq ORF: 3501 bp

Locus ID: 80216

UniProt ID: [Q96QP1](#)

Cytogenetics: 4q25

**Protein Families:** Druggable Genome, Protein Kinase

**Gene Summary:** This gene encodes an alpha kinase. Mice which were homozygous for disrupted copies of this gene exhibited coordination defects (PMID: 21208416). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]